

## ABSTRACT OF THE DISCLOSURE

1           The invention relates to a method of and to an  
2   apparatus for ascertaining the transverse dimensions,  
3   such as diameters, of one or more rod-shaped articles,  
4   for example, continuous or finite-length cigarette rods  
5   and/or other rod-shaped smokers' products. When the me-  
6   thod and/or the apparatus is utilized to ascertain the  
7   transverse dimensions of a single rod-shaped article,  
8   such as a continuous cigarette rod which is stationary,  
9   which turns about its longitudinal axis and/or which is  
10  moved lengthwise, the apparatus can employ at least one  
11  radiation source which emits a beam of radiation against  
12  the stationary or moving article whereby the article  
13  intercepts a first portion of the beam and permits the  
14  remaining portion to impinge upon a device which evaluat-  
15  es the non-intercepted portion of the beam and generates  
16  signals denoting the diameter of the article. The appa-  
17  ratus also employs an arrangement, such as a motor and  
18  a belt-and-pulley device, for selectively altering the  
19  orientation of the beam and the article relative to each  
20  other; this enables the evaluating device to furnish  
21  signals which can be processed to indicate whether or  
22  not the article is round or out of round.